MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CODE: (SP)

SPECIAL PROVISION NO. 907-413-6

DATE: 08/28/2014

SUBJECT: Cleaning and Filling Joints in PCC (Portland Cement Concrete) Pavement

Section 413, Cleaning and Sealing Joints and Cracks, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-413.01--Description. After the last paragraph of Subsection 413.01 on page 294, add the following.

This work may also consist of cleaning and filling joints in existing PCC pavement as designated by pay items in the contract proposal and as detailed and described herein or on the plans. This specification addresses existing PCC pavements with and without an existing asphalt overlays, whether to be overlaid under this contract or not.

<u>907-413.02--Materials</u>. After the last paragraph of Subsection 413.02 on page 294, add the following.

The bituminous joint filling material for cleaning and filling joints shall be hot poured material meeting the requirements of Subsection 907-707.02.1.3, Concrete Joint Sealer Compound - Hot-Poured Elastic Type, or of the type designated on the plans. The filler aggregate for cleaning and filling joints shall be seal slag or stone, Size No. 89, meeting the requirements of Subsection 703.14. When asphalt is specified to fill joints, the mixture used shall be either 9.5-mm or 12.5-mm mixture, or the same as that specified for the wearing course to be placed under this contract, if applicable.

907-413.03--Construction Requirements.

<u>907-413.03.1--Equipment</u>. After the last paragraph of Subsection 413.03.1 on page 294, add the following.

The equipment for cleaning and filling joints shall be that necessary for exposing the PCC joint by removing any existing asphalt over the joint by milling or other approved methods, cleaning the joint by removing existing materials from the joint, and placing the specified joint filler materials in accordance with these specifications. Heating equipment shall meet the requirements of Subsection 702.03. Pouring equipment shall be subject to the approval of the Engineer and shall be capable of pouring the joints to the required elevation while the material is at the proper temperature. Cleaning equipment shall consist of mechanical or hand operated devices capable of removing all existing joint materials (soil, asphalt, debris) to the depth specified herein, without causing damage to the existing joint faces or the surface of the PCC pavement. Prior to filling the joint, it shall be blown free of all loose material by compressed air.

Air compressors shall be equipped with suitable traps and/or filters capable of removing moisture and oil from the compressed air.

<u>907-413.03.2--Construction Methods.</u> After Subsection 413.03.3.4 on page 297, add the following.

907-413.03..4--Cleaning and Filling Joints Any existing asphalt over the joint shall be removed by milling or other approved methods so as to expose the PCC joint for cleaning and filling. All existing joint materials (soil, asphalt, debris) shall be removed to the depth specified herein, without causing damage to the existing joint faces or the surface of the PCC pavement. Joints shall be filled immediately upon cleaning. The joint shall be filled to the specified depth with the required filler(s) as shown in the applicable detail. When asphalt or aggregate is placed as joint filler, the asphalt or aggregate shall be slightly mounded in the joint and compacted as directed by the Engineer to seat the asphalt or aggregate in the joint. After compaction, excess material (asphalt or aggregate) shall be removed and the pavement surface cleaned as necessary, so as to leave the asphalt or aggregate filler flush with the existing PCC pavement. Any existing asphalt over the joint which requires removal shall be replaced with either 9.5-mm or 12.5-mm mixture or the same mixture as that specified for the wearing course to be placed under this contract, if required. The asphalt shall be properly compacted with a roller or other mechanical compaction device approved by the Engineer, either prior to opening to traffic, or prior to placement of the subsequent overall asphalt course. Placement of any required subsequent overall asphalt course shall begin upon completion of the cleaning and filling operation. For PCC pavements without existing asphalt overlays in place, and which are not to be overlayed with asphalt under this contract, joints shall be cleaned and filled as described above and as shown on the applicable detail.

Joints less than one-half inch in width will not be cleaned and filled.

907-413.04--Method of Measurement. After the last paragraph of Subsection 413.04 on page 297, add the following.

Cleaning and filling joints in PCC pavement will be measured by the linear foot of joint. Removal of existing asphalt over the joint, joint filler aggregate, bituminous material, and the replacement of asphalt over the joint, if applicable, will not be paid for separately but will be included in the unit price per linear foot for cleaning and filling joints.

<u>907-413.05--Basis of Payment</u>. After the last paragraph of Subsection 413.05 on page 298, add the following.

Cleaning and filling joints in PCC pavement, measured as prescribed above, will be paid for at the contract unit price per linear foot, which price shall be full compensation for furnishing all materials including filler aggregate and bituminous material, for all work required to expose the PCC joint, for cleaning, filling, and compacting the joint, for placing any required asphalt over the joint prior to the placement of the subsequent overall asphalt course, if applicable, and the cleanup and disposal of all excess and waste; for all pertinent operations necessary and incidental to the construction as herein indicated, and for all equipment, tools, labor and incidentals

necessary to complete the work. The price for cleaning and filling joints as directed by the Engineer shall include the cost of continuous maintenance of traffic and protective services as required by the Traffic Control Plan. This shall include all required individual traffic control devices.

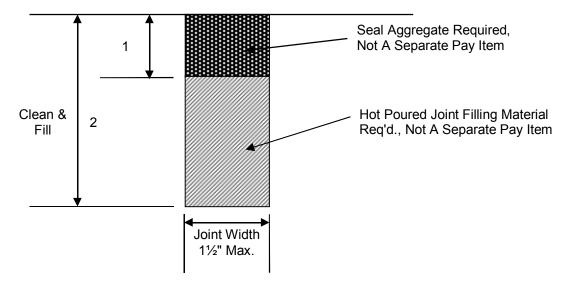
Add the following to the list of pay items on page 298.

907-413-D: Cleaning and Filling Joints in PCC Pavement *

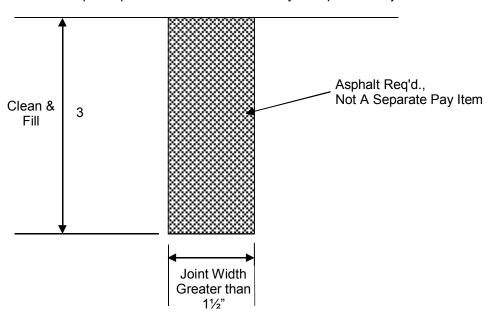
- per linear foot

* When the PCC is overlaid with asphalt, specify the asphalt depth as <u>10" or Less</u> or <u>Greater Than 10"</u>.

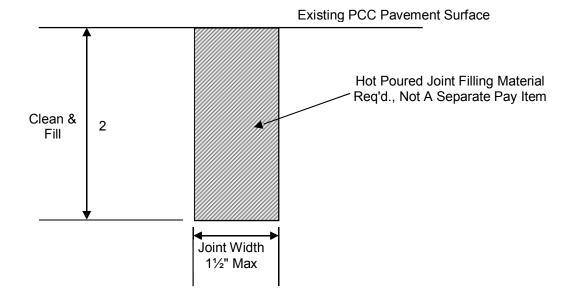
Variable Depth Asphalt—Remove as necessary to expose PCC joint

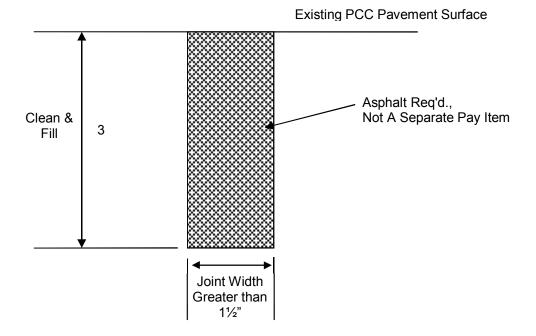


Variable Depth Asphalt—Remove as necessary to expose PCC joint



JOINT CLEANING AND FILLING DETAIL FOR PCC PAVEMENTS WITH EXISTING ASPHALT OVERLAY





JOINT CLEANING AND FILLING DETAIL FOR PCC
PAVEMENTS WITHOUT EXISTING ASPHALT OVERLAY